H

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,144	03/21/2001	Luiz Buchsbaum	A7979	1425

7590 08/25/2004

SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER	
PIZARRO, RICARDO M	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 08/25/2004

H

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/813,144	BUCHSBAUM ET AL.	
	Examiner	Art Unit	
	Ricardo M. Pizarro	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If the period for reply specified above is less than six (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-17, 19-23* is/are rejected.

7)☒ Claim(s) *5 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings. In unusual circumstances, the formal drawings from the abandoned parent application may be transferred by the grant of a petition under 37 CFR 1.182.

Claim Objections

2. Claims 3-7, 9, 10-18, 19, 20, 22 and 23objected to because of the following informalities and it is suggested to applicant :

In claim 3 line 7 insert "said client" before –user statistics-.

In claim 4 line 2 delete the second occurrence of "the".

In claim 5 line 2 replace "transmission" with -communication-, insert "at least one" before -destination-.

In claim 6 line 1 delete the first occurrence of "the", in line 2 replace "channels" with -channel-.

In claim 7 line 1 delete the first occurrence of "the".

In claim 9 line 5 delete the second occurrence of "the", insert "bidirectional" before -return-, in line 7 delete the third occurrence of "the", in line 8 insert "at least one" before -upstream-, in line 9 delete "from the", insert "corresponding bidirectional" before -return-, in line 11 insert "at least one" before -downstream-, in lines 12 and 14 delete "at least one".

In claim 10 lines 4 and 6 insert "second" before -return-.

In claim 17 line 2 delete (;) , in line 3 insert "," after -device-, delete "that", insert "said transmission device" before -transmits-.

In claim 19 line 7 delete the second occurrence of "the", in line 10 delete "received from the source", in line 11 insert " to send said information to said server and" after -configured-, in line 12 delete the second occurrence of "a', in line 22 replace the first occurrence of "a" with -wherein said-.

In claim 20 line 7 "the" with -a-, line 9 replace the first occurrence " the" with -a-, delete "one of" , insert "request" after -information-.

In claim 23 line replace "is" with -if-, insert 'from " after -stream-.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 21-22 recite the limitation "said network" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-4, 6-8, 10-17, 20, 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Kelly.

US patent No. 6,650,869 (Kelly et al) discloses a System and method for managing return channel bandwidth comprising A method of performing IP multicast communication, comprising the steps of: (a) at least one client (plurality of user terminal, col 4 lines 59-63) requesting the IP multicast communication from a source via at least one bidirectional communication channel (Internet network 105 in Fig. 2) ; and (b) transmitting the IP multicast communication generated at the source (col 7 lines 20-25) to at least one destination (PC 101 in Fig. 2) via a unidirectional communication channel that operates independently of the at least one bidirectional communication channel (please notice that satellite dish 107 in Fig. 2 operates as an unidirectional channel, receiving information from NOC 113 and transmitting unidirectionally only to antenna 111 , although the network itself might be two-way) wherein the at least one client is positioned in the at least one destination (said client 101 is positioned in at least one destination in Fig. 2), as in claim 1; further comprising the source receiving a confirmation from the at least one destination via the at least one bidirectional communication channel in response to a confirmation request transmitted from the source to the at least one destination (after successfully receiving a package, user 101 may send a confirmation to a package delivery server within NOC 113 in Fig. 2, col 6 lines 63-67), as in claim 2; further comprising encoding a live media stream for transmission to the at least one client in the step (b) (modulator 405 encodes data stream, col 10 lines 18-19 and 25-28) as in claim 4; wherein step (a) comprises using a

number of the at least one bidirectional communication channels that is less than or equal to a number of the at least one destination (the bi-directional channel being the Internet will be an equal number in the case of one destination or a lesser number in the case of two or more destinations) as in claim 6; further comprising using the Internet as the at least one bidirectional communication channel (Internet network is the bi-directional channel in Fig. 2) , as in claim 7; the step (b) comprising transmitting the IP multicast communication from a transmitting satellite dish at the source (satellite dish located on NOC 113 in Fig. 2) to a to a receiving satellite dish (receiving satellite dish 111 in Fig. 2) at the at least one destination through a unidirectional satellite (unidirectional satellite 107 in Fig. 2) , as in claim 8; further comprising configuring a router in a transparent manner for application to multi-hop networks positioned in at least one of said source and the at least one destination (NOC 113 performs as an interface between networks, see NOC routing equipment in Fig. 4, col 5 lines 9-10), as in claim 21.

A system for IP multicast communication, comprising: a destination that transmits a request via a return channel (destination i.e user side 101 in Fig. 2 that send a request through a return channel interface, col 6 lines 14-15) and receives an IP multicast communication from a unidirectional communication channel (please notice that satellite dish 107 in Fig. 2 operates as an unidirectional channel, receiving information from NOC 113 and transmitting unidirectionally only to antenna 111 , although the whole network itself might be two-way); and a source that receives the request through a return channel (source being the NOC 133 side in Fig. 2 that receives request though return channel interface), and generates and transmits the IP multicast communication to the unidirectional communication channel in accordance with the request, wherein the unidirectional communication channel and the return channel operate independently

(said return channel and satellite 107 operate independently), as in claim 10; wherein the unidirectional communication channel comprises a satellite (satellite 107 in Fig., 2) , as in claim 11 ; the destination comprising: at least one downstream network having a client that generates the request (plurality of user 101 in Fig. 1, col 4 lines 60-63) and a reception device that receives and transmits the IP multicast communication (antenna 111 in Fig. 2 that that receives data from satellite and transmits to destination) from the unidirectional communication channel that communicates via the return channel, as in claim 12; wherein the return channel comprises the Internet (Internet access in Fig. 2, as in claim 13; wherein the source is configured to record usage statistics for requesting a client at the destination, and generates a bill in response to the usage statistics (col 14 lines 30-34), as in claim 14; the source comprising a media server (CAC server 425 in Fig. 4) that prepares a media stream and an upstream network (LAN 421 and 425, col 11 lines 29-34) that is coupled to the media server and receives the media stream and generates the IP multicast communication (CAC server 425 part of NOC 113 in Fig. 4 , said NOC including a plurality of gateways that support media and IP multicast in Fig. 4, col 5 lines 9-10, col 7 lines 21-22, col 11 lines 35-40, col 12 lines 4-7), as in claim 15; the source further comprising a media encoder that receives a live media stream and transmits the live media stream to the media server for real-time transmission to a client at the destination, (modulator 405 in NOC 113 in Fig. 4 is located at the source encodes data stream, col 10 lines 18-19 and 25-28) as in claim 16; further comprising a router (NOC 113 in Fig. 2 acts as an interface between network) coupled between the upstream network and a transmission device that transmits the IP multicast communication to the unidirectional communication channel

(antenna in NOC 113 transmits to unidirectional satellite 107 in Fig. 2), as in claim 17; further comprising a router configured transparently located in at least one of said source and said destination (NOC 113 performs as an interface between networks, see NOC routing equipment in Fig. 4, col 5 lines 9-10), as in claim 22.

A method of transmitting data between a source (source being NOC 113 side in Fig. 1) and at least one destination(user 101 side in Fig. 1) , comprising: transmitting a request signal, from the at least one destination to the source over the Internet (Internet 105 in Fig. 1); processing a live media stream in the source in accordance with the request signal (NOC 113 in Fig. 1 has connectivity to the Internet and intranets and supports real-time audio and video applications, col 5 lines 8-14) generating an IP multicast signal that includes the media stream, and transmitting the IP multicast signal to the at least one destination via an unidirectional communication channel (NOC 113 IN Fig, 1 and 4 includes a plurality of gateways that support media and IP multicast in Fig. 4, col 5 lines 9-10, col 7 lines 21-22, col 11 lines 35-40, col 12 lines 4-7); and through the(col 14 lines 30-34), return channel, transmitting one of usage information from the source to the destination and confirming reception of the IP multicast signal by a client in the at least one destination (after successfully receiving a package, user 101 may send a confirmation to a package delivery server within NOC 113 in Fig. 2, col 6 lines 63-67), as in claim 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3 , 9 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly.

US patent No. 6,650,869 (Kelly et al) discloses a System and method for managing return channel bandwidth comprising A method of configuring IP multicast communication, comprising the steps of: requesting the IP multicast communication from a client in one of downstream network (downstream network on user side 101 in Fig. 2) to an upstream network (upstream network on NOPC 113 side in Fig. 2) via a corresponding bidirectional return channel (Internet 105 in Fig. 1 being the bi-directional channel); (b) encoding a live media stream in the IP multicast communication (modulator 405 in NOC 113 in Fig. 4 is located at the source encodes data stream, col 10 lines 18-19 and 25-28) and transmitting the IP multicast communication generated at the upstream network (transmission through antenna in NOC 113) to the at least one downstream network via a unidirectional satellite (unidirectional satellite 107 in Fiig.2) that operates independently of the corresponding return channel (said satellite operates independently than the bi-directional channel), the transmission of the live media occurring in real-time without being stored at the destination prior to receipt by the client (NOC 113 in Fig. 1 has connectivity to the Internet and intranets and supports real-time audio and video applications,

col 5 lines 8-14) ; (c) the upstream network receiving a confirmation of receipt of the IP multicast communication by the from the client via the return channel in response to a confirmation request transmitted from the upstream network to the downstream network (after successfully receiving a package, user 101 may send a confirmation to a package delivery server within NOC 113 in Fig. 2, col 6 lines 63-67), as in claim 9; , measuring and reporting usage information on the channels (i.e.(a) recording a receiving time indicative of the at least one client starting to receive the IP multicast communication;(b) recording a termination time indicative of the at least one client terminating reception of the IP multicast communication, col 14 lines 30-34) ,calculating client user statistics and generating a bill for the IP multicast communication in accordance with user statistics, wherein at least one of steps (a) and (b) is performed at the source (system 100 measures usage and provides billing information, that may be available on a real-time basis in NOC 103 -source- in Fig.2), as in claims 3 and 9.

Kelly did not specifically disclose further comprising: (a) recording a receiving time indicative of the at least one client starting to receive the IP multicast communication; (b) recording a termination time indicative of the at least one client terminating reception of the IP multicast communication, as in claim 3, neither turning off a stream is there is no client listening to said stream, as in claim 23 ***however*** Kelly in col 14 lines 30-34 disclosed measuring and reporting usage on the channels and in col 5 lines 34-36 also disclosed ensuring maximum bandwidth efficiency by minimizing waste due to unused allocated bandwidth.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention that measuring said usage information would have been a result of knowing the start and end on a communication between two parties and could have been carried out by

recording a receiving time and recording of a termination time indicative of the at least one client terminating reception of the IP multicast communication, and disconnecting a stream would have been one of the ways to minimize waste of unused allocated bandwidth with the motivation of obtaining a access managing system that permits one-way satellite system user to upgrade systems in a cost-effective manner and minimize cost to the user to thereby stimulate market acceptance.

Allowable Subject Matter

7. Claims 5 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Please also notice objection to claims under 37 CRR 1.75

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US patent No. 6,389,453 discloses a Method of routing unidirectional multicast data
- US patent no. 6,441,782 discloses a Method of directing an antenna in a two-way satellite network,

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

(for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (703) 305-1121. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:30 PM. The fax number for this Group is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Douglas Olms**, can be reached on (703) 305-4703.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

8/19/04

Ricardo M. Pizarro